

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Method for error correction of an encoded data stream including the steps of:

- saving a demodulated data stream in an input buffer;
- performing a first correction process on-the-fly in the input buffer;
- transferring the data to an external DRAM after correction;
- copying the data from the external DRAM to an embedded SRAM;
- starting a multipass correction in the embedded ~~SRAM; and~~ SRAM;
- copying the corrected data back from the embedded SRAM to the external DRAM after the multipass ~~correction;~~ correction; and
- deinterleaving and/or correcting streaming discontinuities in the external DRAM.

2. (Previously Presented) Method according to claim 1, wherein streaming discontinuities of less than one row are corrected immediately in the input buffer while streaming discontinuities of one row or more are corrected in the external DRAM.

3. (Previously Presented) Method according to claim 1, further including the step of using the external DRAM for deinterleaving.

4. (Previously Presented) Method according to claim 1, wherein the data stream includes data frames consisting of data rows and columns including horizontal and vertical parity data for correcting errors in the data frame.

5. (Previously Presented) Method according to claim 1, wherein the size of the input buffer is at least twice the number of bytes per row of the data frame.

6. (Previously Presented) Method according to claim 1, wherein the input buffer is an SRAM.

7. (Previously Presented) Method according to claim 1, further including the step of storing status bits in a status memory, the status bits indicating if a row of the data frame is correct or not.

8. (Currently Amended) Device for error correction of an encoded data stream, including:

- an input buffer for saving a demodulated data stream and performing a first correction process on-the-fly;

- an external DRAM to which the data are transferred after correction;

- an embedded SRAM for performing a multipass correction on the corrected data;

- means for copying the data frame from the external DRAM to the embedded ~~SRAM;~~ and SRAM;

- means for copying the corrected data back from the embedded SRAM to the external DRAM after the multipass ~~correction;~~ correction; and

- a deinterleaver for deinterleaving and/or for correcting streaming discontinuities in the external DRAM.

9. (Cancelled) ~~Device according to claim 8, further including a deinterleaver for deinterleaving and/or for correcting streaming discontinuities in the external DRAM.~~

10. (Previously Presented) Apparatus for reading from a recording media and writing to a recording media, wherein said apparatus includes means for performing a method according to claim 1.